

**System and Method for JIT Memory Footprint
Improvement for Embedded Java Devices**

ABSTRACT

A system and method for reclaiming memory occupied by compiled code resulting from a Just-in-Time (JIT) compiler is provided. An address space used to store code resulting from a JIT compiler is memory mapped using a special filesystem. A map is maintained identify method name and corresponding JIT pages. When the memory manager needs more space, it requests that the special filesystem write the data from memory back to nonvolatile storage. The special filesystem acts as if the data was written. When the code is subsequently called, a page fault and an invalid operation exception occur and are handled. The data in the map is used to recompile the method to the same address space and the faulting instruction is re-executed.